

Project No. 75 ACWWA Redundancy Pipeline

Description: The Redundant Pipeline Project was originally proposed to construct a 24” pipeline that would connect ACWWA’s 4 million gallon storage tank in Chapparral to the Town of Foxfield. This new pipeline would act as a redundant pipeline should there be a failure of ACWWA’s 36” transmission line in Arapahoe Road. The design of the pipeline is nearing 100% design. The updated probable costs are now \$5.5-6.0 million. With the costs being so substantial, ACWWA staff have discussed this project and the risk that it aims to mitigate. At this time, ACWWA does not believe that the potential risks associated with deferring this project justify the current costs.

ARPA Funding = \$ 500,000

Opinion of Probable Costs = \$ 6,000,000

ACWWA would like to discuss alternative projects to reallocate the previously committed ARPA funds.

Project No. 77 ACWWA-Cottonwood Joint Water Purification Plant Project

Description: The original concept of this project was to implement iron and manganese filtration which would allow for a greater supply of Cherry Creek alluvial groundwater to be treated at the Joint Water Purification Plant (JWPP) which is owned by ACWWA and Cottonwood Water and Sanitation District (Cottonwood). The JWPP is a critical supply for both ACWWA and Cottonwood as it treats Cherry Creek alluvial groundwater to meet Safe Drinking Water Act requirements before it is sent out to customers. The Environmental Protection Agency has recently adopted new per- and poly-fluoroalkyl substances (PFAS) regulations. In order for the JWPP to meet the new regulations, the total finished water treatment capacity will be reduced by 30%. Neither entity has other renewable sources to make up for this lost capacity. ACWWA and Cottonwood are currently conducting studies and evaluations to determine what course of action is most promising to comply with the new regulations, recoup the lost capacity, dispose of reverse osmosis concentrate, and also iron and manganese.

ARPA Funding = \$ 800,000

ACWWA has been in contact with County personnel and understands that the ongoing studies and evaluations may not qualify for ARPA funding per the Drinking Water State Revolving Fund eligibility. ACWWA staff have prepared alternatives for discussion with the Board of County Commissioners.

Project No. 124 Valley Country Club Lift Station Upgrades

Description: The Valley Country Club Lift Station is ACWWA’s largest lift station and serves roughly 50% of its wastewater customers including the Cottonwood Water and Sanitation District. The upgrade improvements will increase the reliability of the lift station and provide resiliency from future natural hazards and disasters, thus adding further protection from future wastewater flooding of homes, Cherry Creek, and Cherry Creek Reservoir. The upgraded lift station also provides back-up redundancy for the City of Aurora in case of failure of the City of Aurora’s Lot 15 lift station. This

project will entail replacing and upgrading much of the existing electrical and control equipment which operates the lift station, as well as moving the control equipment above ground which will improve the reliability and resiliency of the lift station.

Construction Contract Amount = \$ 2,064,108

ARPA Funding = \$ 500,000

Status: The project was completed and closed out in February 2024.

Project No. 125 Peoria Lift Station Upgrades

Description: The Peoria Lift Station is ACWWA's second largest lift station. The station collects the wastewater flows from the westernmost portion of ACWWA's service area and pumps the flows to the Lone Tree Creek Water Reuse Facility for treatment prior to discharge. The station was put into service in January 2002 and an improvement project was necessary to ensure its continued operation. The project scope includes the replacement of pumps, electrical equipment, valves, yard piping, and the construction of a new differential flow meter vault south of the main site per Cherry Creek Basin Water Quality Authority requirements.

Original Construction Contract Amount = \$ 1,258,000

ARPA Funding = \$ 500,000

Construction Contract Change Orders = \$ 674,756

Final Construction Contract Amount = \$ 1,932,756

Status: Project is roughly 95% complete. All items at the main site are complete and operational. The new flow meter vault is in place but awaiting Xcel Energy to upgrade and extend electrical service. Project is expected to be completed by February 2025.

Project No. 126 Alluvial Well

Description: ACWWA's most productive potable alluvial well that supplies its Joint Water Purification Plant is in need of replacement. The redrilling of the well will ensure a reliable, renewable water supply for ACWWA customers.

Redrilling Contract Amount = \$ 236,435

Original ARPA Funding = \$ 500,000

Revised ARPA Funding = \$ 236,435

Status: The redrilling is scheduled for the end of October and will be complete within 4 weeks.

Project No. 127 Critical Valve Replacement

Description: ACWWA has identified two valves in need of immediate replacement in Arapahoe Road. One of the valves is 18” in diameter and located at the cross streets of Arapahoe Road and Potomac Street, and the other is 12” in diameter and located at Arapahoe Road and Revere Parkway. Both of these valves are vital to the transmission of water along Arapahoe Road, and they are a part of the original distribution network dating to the 1980’s.

Construction Costs = \$ 100,000

ARPA Funding = \$ 100,000

Status: The 12” valve was replaced on October 14th and the 18” valve is scheduled to be replaced in October or early November. A third valve is also scheduled to be completed soon which will expend all remaining funding for this project.

Proposed Projects for Remaining ARPA Funds Associated with Project Nos. 75 & 77

ARPA Funding Project No. 75 = \$ 500,000

ARPA Funding Project No. 77 = \$ 800,000

Project No. 125 Peoria Lift Station Upgrades: The project costs increased substantially due to the need for extended bypass pumping while certain tasks were completed at the main site. ACWWA had initially planned to divert flows to a neighboring utility, but ultimately ran into organizational and operational challenges that could not be overcome. Below is a summary of ACWWA’s request.

Original Construction Contract Amount = \$ 1,258,000

Original ARPA Funding = \$ 500,000

Construction Contract Change Orders = \$ 674,756

Final Construction Contract Amount = \$ 1,932,756

Additional ARPA Funding Request = \$ 500,000

Total ARPA Funding Request = \$ 1,000,000

The additional ARPA Funding Request would help offset the additional costs incurred on the project. This project provides certainty to the County in that 95% of the project is completed, and the remaining items are slated to be completed by the end of February 2025.

ACWWA-Cottonwood Joint Water Purification Plant Projects: ACWWA would like to propose that some amount of ARPA funding still go towards improvements at the Joint Water Purification Plant (JWPP). Below are four other projects at the JWPP that are necessary to address aging infrastructure concerns and meet the eligibility criteria of the Drinking Water State Revolving Fund.

Supervisory Control and Data Acquisition (SCADA) System Upgrade =	\$ 600,000
Replacement of Finished Water Pumps 2 & 3 =	\$ 210,000
Replacement of Rooftop Unit AC-1 =	\$ 90,000
Replacement of Effluent Pump Station Piping =	\$ 60,000
Total Cost of Projects =	\$ 960,000
ARPA Funding Request =	\$ 500,000

The existing SCADA system at the JWPP is aging, obsolete, and noncompliant with the National Institute of Standards and Technology standards for cybersecurity. Should components of the supervisory controls fail, there are no immediate replacements and the JWPP would cease operations. Both ACWWA and Cottonwood Water and Sanitation District depend on production from the JWPP to meet demands. The upgrade project is largely scoped. The next steps are bid solicitation, contract award, and project implementation.

The remaining three JWPP aging infrastructure replacement projects are primarily large capital equipment procurements and will be relatively simple projects to implement. ACWWA is confident that all four of the above JWPP projects will be completed by the end of 2025 or the beginning of 2026 if the County makes ARPA funds available.

Additional Projects for consideration:

ACWWA's Administration Building Remodel and Expansion =	\$ 3,300,000
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This project is eligible under the Drinking Water State Revolving Fund and will be completed in 2025.

Lone Tree Creek Water Reuse Facility Hydrogen Sulfide Damage Repair =	\$ 1,200,000
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This project entails the construction of a parallel sewer interceptor and measuring flume at the entrance to ACWWA's wastewater treatment facility. The current interceptor and flume have significant hydrogen sulfide damage. This project is scheduled to be in design in 2025 and constructed in 2026. If ARPA funding is made available, the project will be accelerated.